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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/780,945

02/18/2004

Christopher J. Abel

Abel 6-4-7-2-57

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EXAMINER

TRAN, PHUC H

ART UNIT

PAPER NUMBER

2616

MAIL DATE

DELIVERY MODE

08/21/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/780,945	Applicant(s) ABEL ET AL.	
	Examiner PHUC H. TRAN	Art Unit 2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 9-12 is/are allowed.
- 6) ☒ Claim(s) 1-5, 7 and 8 is/are rejected.
- 7) ☒ Claim(s) 6 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-5 and 7-8 are rejected under 35 U.S.C. 102(e) as being anticipated by Trans (2002/0181633).

Note: The term “adapted to” recited in claims 1-3 and 5 are not positively recited claimed limitation. Therefore, the limitations “adapted to adjust a skew of a driver of the first path so as to compensate for crosstalk effects in the first path”, “adapted to combine the adjusted replica with a signal of a second path so as to compensate for crosstalk effects in the second path from the signal in the first path”, “adapted to generate an adjusted replica of a signal in the adjacent channel, and wherein the combiner is further adapted to combine the adjusted replica of the signal of the adjacent channel with the signal of the second path so as to compensate for the crosstalk effects in the second path from the signal of the adjacent channel”, “adapted to adjust the positive-to-negative skew of the differential driver”, and “adapted to generate a high-speed clock signal and a sync signal based on the high speed clock; and at least one divider, each divider adapted to divide the high-speed clock signal into the low-speed clock signal, and

wherein each divider is synchronized to each other divider based on the sync signal". It is suggested applicants remove the term.

For claims 1-5 and 7-8, Trans discloses a system comprising a first adjuster (see box M203 in figure 3a), coupled to a first path, a second adjuster (see box 208 in figure 3a), coupled to the first adjuster a combiner (see figure 5e box (+), coupled to the second adjuster, and a clock synchronization generator, (see box 12 in figure 8-1) wherein the relatively low-speed clock signal aligns timing events of a relatively high-speed clock signal that coordinate events in the first and second paths (see box 12 in figure 8-1); further comprising: a third adjuster (see box M210 in figure 3a), coupled to an adjacent channel and the combiner; wherein the signal of the first path is a differential signal, the driver is a differential driver; wherein the signal of the second path is a differential signal, and the combiner is a differential subtraction circuit (see figure 5e box (+)); wherein the clock synchronization generator comprises: a phase-locked loop (PLL) (see paragraph 0123); the apparatus is embodied in a circuit (see figure 3a); wherein the circuit is an integrated circuit (see figure 3a).

Allowable Subject Matter

3. Claim 6 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
4. Claims 9-12 are allowed.

For claims 9-12, the prior art fails to teach a combination of generating an adjusted replica of the signal in the first path; combining the adjusted replica of the signal in the first path

Art Unit: 2616

with a signal of a second path so as to compensate for near-end crosstalk effects in the second path; generating a relatively low-speed clock signal; and aligning, based on the low speed-clock signal, timing events of a relatively high-speed clock signal coordinating events in the first and second paths between the near end and the far end.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Deas et al (6,820,234) and Trans (6,377,640) are all cited to show systems which are considered pertinent to the claimed invention.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to PHUC H. TRAN whose telephone number is (571) 272-3172. The examiner can normally be reached on M-F (8-4:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, CHI PHAM can be reached on (571) 272-3179. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2616

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Phuc Tran
Assistant Examiner
Art Unit 2616

P.t
8/20/07



WELLINGTON CHIN
PRIMARY PATENT EXAMINER